

**NATIONAL INSTITUTES OF HEALTH
Warren Grant Magnuson Clinical Center**

Standard of Practice: Care of the Patient Receiving Parenteral Nutrition

I. ASSESSMENT

- A. Prior to starting infusion, review label affixed to nutritional product container:
 - 1. for patient's name, total volume, rate, and expiration date/time.
 - 2. to determine if the product has been identified for central or peripheral line infusion.
 - 3. to compare for accuracy the label affixed to nutritional product container against the medical order.
- B. Assess that the hourly infusion rate of Potassium Chloride from ALL parenteral sources does not exceed standards as prescribed in MEC Policy M92-8: Intravenous Infusion of Potassium Chloride <http://push.cc.nih.gov/policies/PDF/m92-8.pdf>.
- C. Visually inspect nutritional product for gross particulate formation.
- D. Visually inspect lipid formulations for discoloration and uniformity of product. Return any product to pharmacy that is questionable.
- E. During course of parenteral nutrition:
 - 1. Weigh patient daily
 - 2. Assess VS (B/P, TPR) every 8 hours.
 - 3. Monitor I & O every 8 hours.

II. INTERVENTIONS

- A. RN is strictly prohibited from adding any ingredient to nutritional product.
- B. Nutritional product will be infused with an electronic infusion device.
- C. Product is to remain refrigerated until one hour before administration at which time, the product can be brought to room temperature by removing it from the refrigerator.
- D. As provided by the Pharmacy, nutritional product will remain covered to protect product from light.
- E. All parenteral nutrition (with or without lipids) should be administered with a 1.2-micron filter. A filter is not needed when administering lipids alone.
- F. PVC-free tubing will be used for infusion of lipids.
- G. Any unused product will be discarded at time of expiration.
- H. No other medications should be administered concurrently through a line through which parenteral nutrition is infusing unless approved by the Pharmacy.
- I. If parenteral nutrition ends abruptly, consult with prescriber.
- J. When parenteral nutrition is discontinued or tapered, blood glucose monitoring and tapering guidelines may be directed by recommendations in the Clinical Center Nutrition Support Handbook (2001) (<http://www.cc.nih.gov/nutr/handbook/tblcont.htm>) but ultimately by the medical order.
- K. Change parenteral nutrition bag, tubing, and filter every 24 hours.

III. DOCUMENTATION

- A. Document bag number, date/start time, date/end time, and rate of administration, and whenever parenteral nutrition infusions changed.
- B. RN must also "complete" the medical order for parenteral nutrition.
- C. Document assessment data and interventions.
- D. Document VAD assessment and interventions per SOP: Venous Access Devices <http://intranet.cc.nih.gov/nursing/SOPVAD1201.htm>.

IV. REFERENCES

- A. American Society for Parenteral and Enteral Nutrition (1998). Safe practices for parenteral nutrition formulations. Journal of Parenteral and Enteral Nutrition, 22(2): 49 - 66.
- B. Clinical Center Nutrition Support Handbook. (2001). Nutrition Department, NIH Clinical Center, Bethesda MD.
- C. Finnegan, S. (1989). Metabolic complications in parenteral nutrition. The Professional Nurse, 4(8): 381 – 384.
- D. Finnegan, S. (1989). Mechanical complications of parenteral nutrition. The Professional Nurse, 4(7): 325 – 327.
- E. Intravenous Nursing Society (2000). Infusion nursing standards of practice. Journal of Intravenous Nursing, 23(6S): S69 – S70.
- F. Kane, KF and others (1996). High osmolality feedings do not increase the incidence of thrombophlebitis during peripheral iv nutrition. Journal of Parenteral and Enteral Nutrition, 20(3): 194 – 197.
- G. McConnell, E. (1998). Clinical do's and don'ts: administering parenteral nutrition. Nursing 1998, 28(7): 18.
- H. O'Neal, BC and others. Compliance with safe practices for preparing parenteral nutrition formulations. American Journal of Health Systems Pharm, 59, 264 – 269.
- I. Orr, ME (1992). Hyperglycemia during nutrition support. Critical Care Nurse, 12(1): 64 – 70.
- J. Reilly, H. (1998). Parenteral nutrition: an overview of current practice. British Journal of Nursing, 7(8): 461 – 467.

Approved:

Clare Hastings, Ph.D., RN
Chief, Nursing and Patient Care Services

Charles E. Daniels, Ph.D.
Chief, Clinical Center Pharmacy Department

Formulated: 3/95
Implemented: 4/96
Revised: 5/99, 09/02

G:\SOP\PARENTERAL NUTRITIONSOP.DOC